

Title (en)  
MOLECULAR ORIENTATION ARTICLES MOLDED FROM HIGH-MOLECULAR WEIGHT POLYETHYLENE AND PROCESSES FOR PREPARING SAME

Publication  
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Application  
**EP 90309423 A 19900829**

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Abstract (en)  
[origin: EP0419060A2] In accordance with the present invention, there are provided high molecular weight polyethylene molecular orientation molded articles formed from high molecular weight polyethylenes having a weight average molecular weight of 300,000-600,000, said molecular orientation molded articles having a fineness of not more than 15 deniers, a tensile strength of more than at least 1.7 GPa and satisfying the tensile strength S (GPa)-weight average molecular weight M. (g/mol)-fineness D (denier) relationship represented by the formula [I]  $S \geq 0.0001M^{0.5}D^{0.5}$  and processes for preparing the same. Further in accordance with the present invention, there are also provided high molecular weight polyethylene molecular orientation molded articles formed from high molecular weight polyethylene having a weight average molecular weight of exceeding 600,000 and satisfying the relationship represented by the formula [II].  $S \geq 0.0001M^{0.5}D^{0.5}$

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Citation (search report)  
• [X] EP 0213208 A1 19870311 - TORAY INDUSTRIES [JP]  
• [X] EP 0192303 A1 19860827 - STAMICARBON [NL]  
• [X] EP 0110021 A2 19840613 - ALLIED CORP [US]  
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• [X] WORLD PATENTS INDEX LATEST Section Ch, Week 38, Derwent Publications Ltd., London, GB; Class A, AN 87-266774 & JP-A-62 184 111 (TORAY) 12 August 1987  
• [A] WORLD PATENTS INDEX LATEST Section Ch, Week 02, Derwent Publications Ltd., London, GB; Class A, AN 83-03267K & JP-A-57 193 319 (ASAHI CHEMICAL) 27 November 1982

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